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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,367	09/30/2003	Liang Jiang	132347-1	5979

23413 7590 12/20/2006
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EXAMINER

ROE, JESSEE RANDALL

ART UNIT	PAPER NUMBER
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1742

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/20/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/675,367

Applicant(s)

JIANG ET AL.

Examiner

Jessee Roe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-18,20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 and 4-10 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims Status

Claims 1-2, 4-10 and 19 remain for examination wherein claim 1 is amended, claim 3 is canceled, and claims 11-18 and 20-21 are withdrawn from consideration.

Status of Previous Rejections

The previous rejections of claim 1-7 and 19 under 35 U.S.C 102(b) as being anticipated by Budinger (US 5,240,491) and claims 8-10 under 35 U.S.C. 103(a) as being unpatentable over Budinger (US 5,240,491) are withdrawn in view of the Applicant's amendments to the claims.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 October 2006 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-10 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw (US 4,039,330).

Shaw ('330) discloses (Table 1) a nickel-containing alloy comprising a composition as shown in the table below:

Element	From Instant Claims (in wt%)	Alloy 2 of Shaw (³³⁰) (in wt%)	Alloy 2 of Shaw (³³⁰) (in at%)
C	about 0.02 to about 0.15	0.15	0.707
Cr	about 14 to about 28	22.6	24.608
Co	about 10 to about 23	10	9.607
W	about 1 to about 3	2.40	0.739
Nb	up to about 3	0.85	0.518
Ta	Not essential	1.45	0.453
Ti	about 1.50 to about 4.50	3.50	4.139
Al	about 1.50 to about 4.50	2.02	4.239
Zr	about 0.01 to about 0.20	0.20	0.124
B	about 0.001 to about 0.025	0.011	0.058
Ni	Remainder	56.819	54.808

In regards to claim 1, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The essential weight percentages of aluminum, titanium, niobium, chromium, and zirconium are present. The weight percentages were converted to atomic percentages and are shown in column above. The atomic ratio of aluminum to titanium is 1.024, which would be within the range of about 0.5 to about 1.5.

In regards to claim 2, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The combined weight percentage of titanium and aluminum would be 5.52, which would be within the range of about 3 to about 9 weight percent.

In regards to claim 4, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The combined weight percentage of titanium, aluminum, and niobium would be 6.37, which would be within the range of about 3 to about 12 weight percent.

In regards to claim 5, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The weight percent of nickel is 56.819 weight percent, which would be within the range of about 40 to about 70 weight percent.

In regards to claim 6, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. Cobalt, carbon, zirconium, tungsten, boron and tantalum are present.

In regards to claim 7, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The weight percent of cobalt is 10 weight percent, which would be within the range of about 10 to about 23 weight percent.

In regards to claim 8, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The weight percent of carbon is 0.15 weight percent, which would be within the range of about 0.02 to about 0.15 weight percent.

In regards to claim 9, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The weight percent of tungsten is 2.40 weight percent, which would be within the range of about 1 to about 3 weight

percent.

In regards to claim 10, Shaw ('330) discloses (Alloy 2 of Table 1) a nickel-containing alloy with a composition as shown above. The weight percent of boron is 0.011 weight percent, which would be within the range of about 0.001 to about 0.025 weight percent.

In regards to claim 19, Shaw ('330) discloses (col. 7, lines 10-37) that the nickel-containing alloy would be used for turbine components such as rotor or stator blades.

Response to Arguments

Applicant's arguments with respect to claim 1-2, 4-10 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessee Roe whose telephone number is (571) 272-5938. The examiner can normally be reached on Monday-Friday 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JR


ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700